2004 Satellite Direct Readout Conference

International Coordination and Collaboration

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Outline

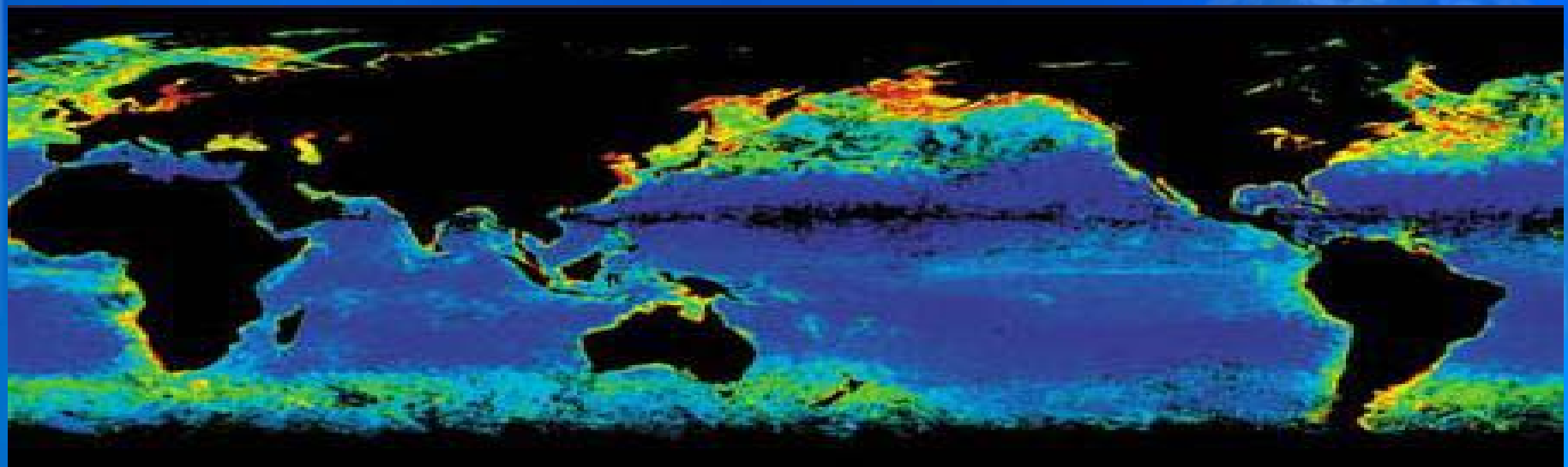
- Decade of Opportunity
  - A Focus on GEO
  - NOAA's Continuity of Products and Service
- Current Access to NOAA Satellites in the Western Hemisphere
- Future Access to NOAA Satellites in the Western Hemisphere

A Decade of Opportunity

Image from Northrop Grumman

A Decade of Environmental Observations

- In the next 10 years, over 100 Earth observing satellites will be launched
- Few integrated plans exist to utilize these data and transfer these benefits to society
- We must focus on utilization of satellite data to realistically achieve these benefits



Earth Observation Summits I and II

GEO Societal Benefits Focus

Natural & Human Induced Disasters

Water Resources

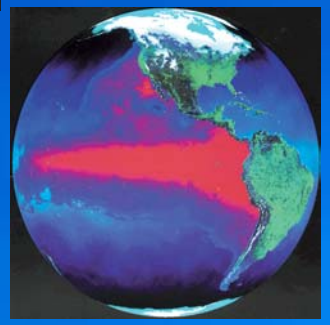
Terrestrial, Coastal & Marine Ecosystems

Human Health & Well-Being

Energy Resources

Sustainable Agriculture & Desertification

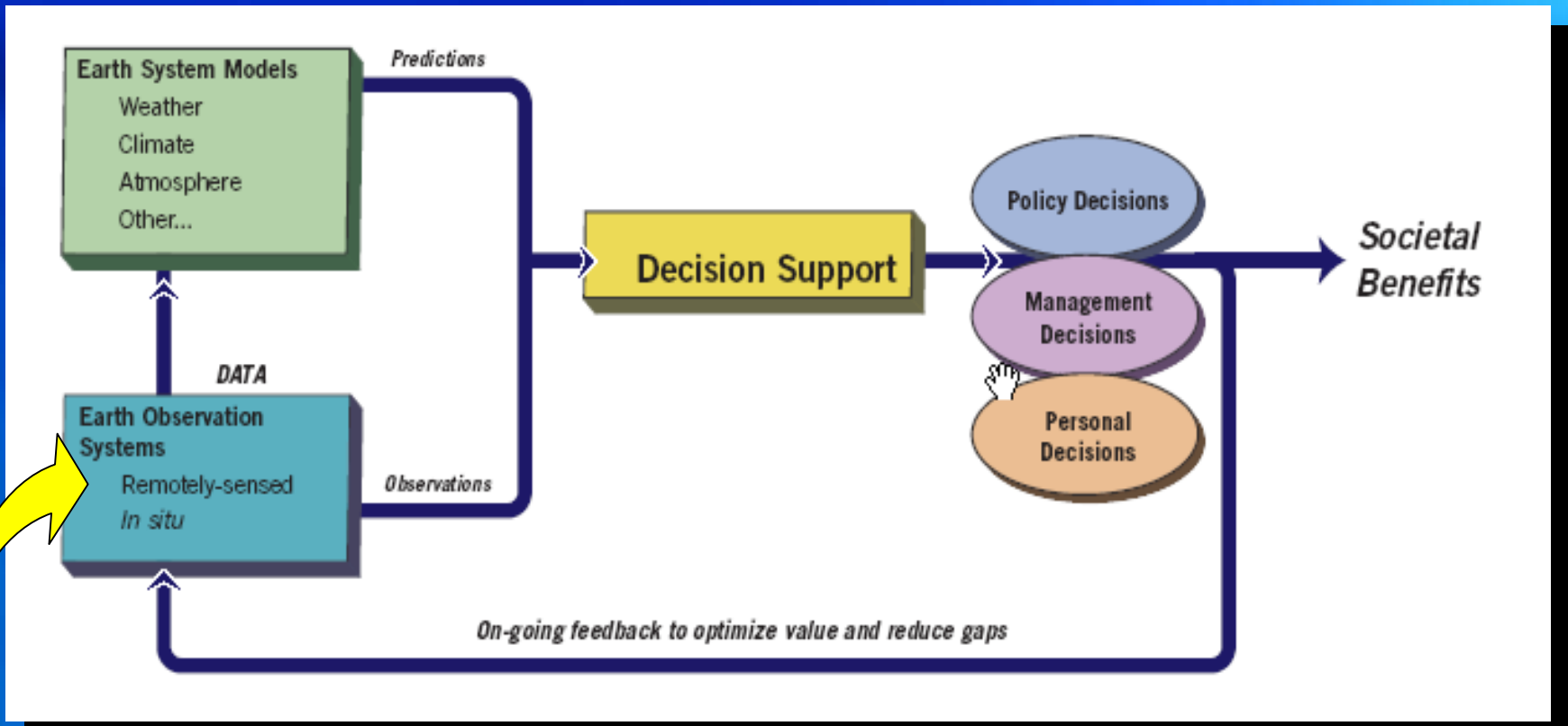
Weather Information, Forecasting &



Climate Variability & Change

Biodiversity

Linking Earth Observations to Societal Benefits



Global Earth Observing System of Systems (GEOSS) Opportunities

- International cooperation - backbone of critical measurements
- Sharing of data from all GEO systems
- Recognition of importance of capacity building
- Requirement for continuity of observations from space
- Coordination of mission planning (WMO, CEOS, etc.) including smoother transition of research missions

U.S. Contribution to GEOSS

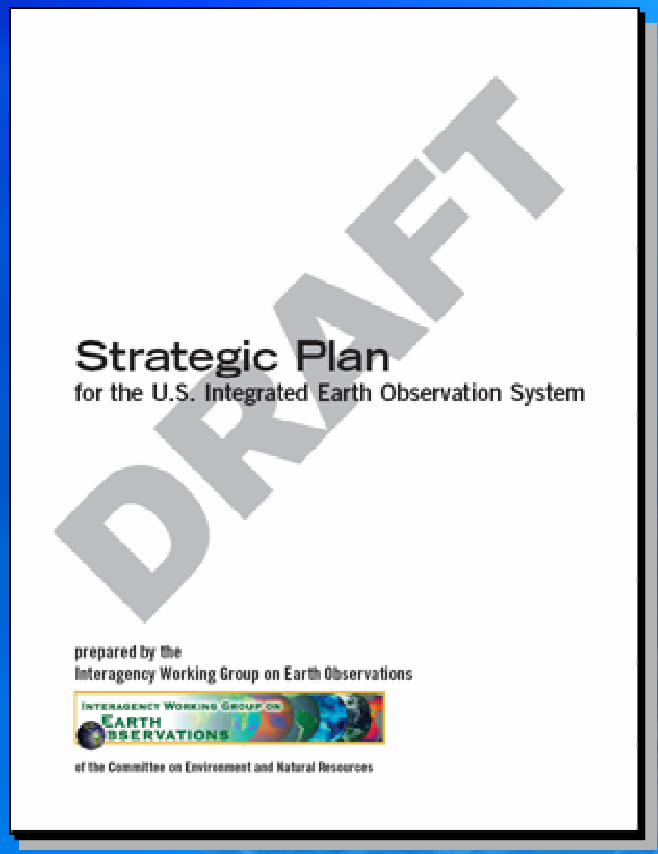
Vision:
Enable a healthy public, economy, and planet through an integrated, comprehensive, and sustained Earth observation system.

National Plan:
Public comment period until November 30, 2004

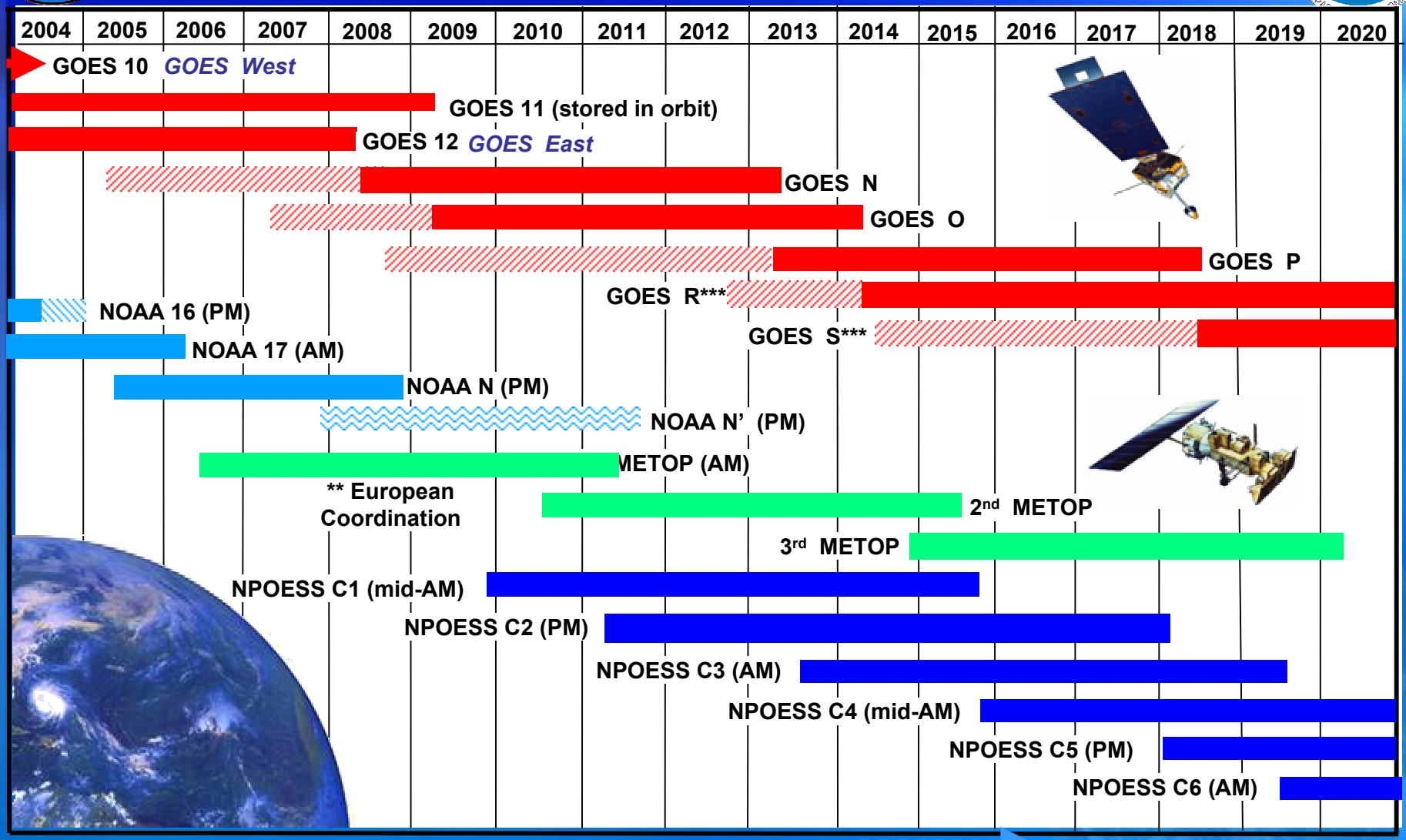
- **Electronic comments only**
- **Available at http://iwgeo.ssc.nasa.gov/**
- **2005 Workshop**

Establish Formal USG Mechanism

- **Capable of committing necessary resources and implementing functions**



Continuity of Operational Satellite Programs
NOAA Satellite Launches* Scheduled to Maintain Continuity



* Actual launch dates are determined by the failure of on-orbit assets

** Assumes METOP will provide the morning orbit and NOAA-N' will provide afternoon orbit instruments

*** GOES R-Series may be single or suite of satellites (distributed constellation)

Satellite is operational beyond design life

On-orbit GOES storage

Extended operation

Current Access to NOAA Satellites

Services in the Western Hemisphere use (non-US):

- 130 GOES GVAR Sites
- 3860 Data Collection Platforms
- ~ 1000 POES APT; ~ 400 POES HRPT

Central South America and Caribbean:

- 58 GOES GVAR Sites
- 1781 Data Collection Platforms (GOES)
- ~ 450 POES APT; ~ 150 POES HRPT

Canada:

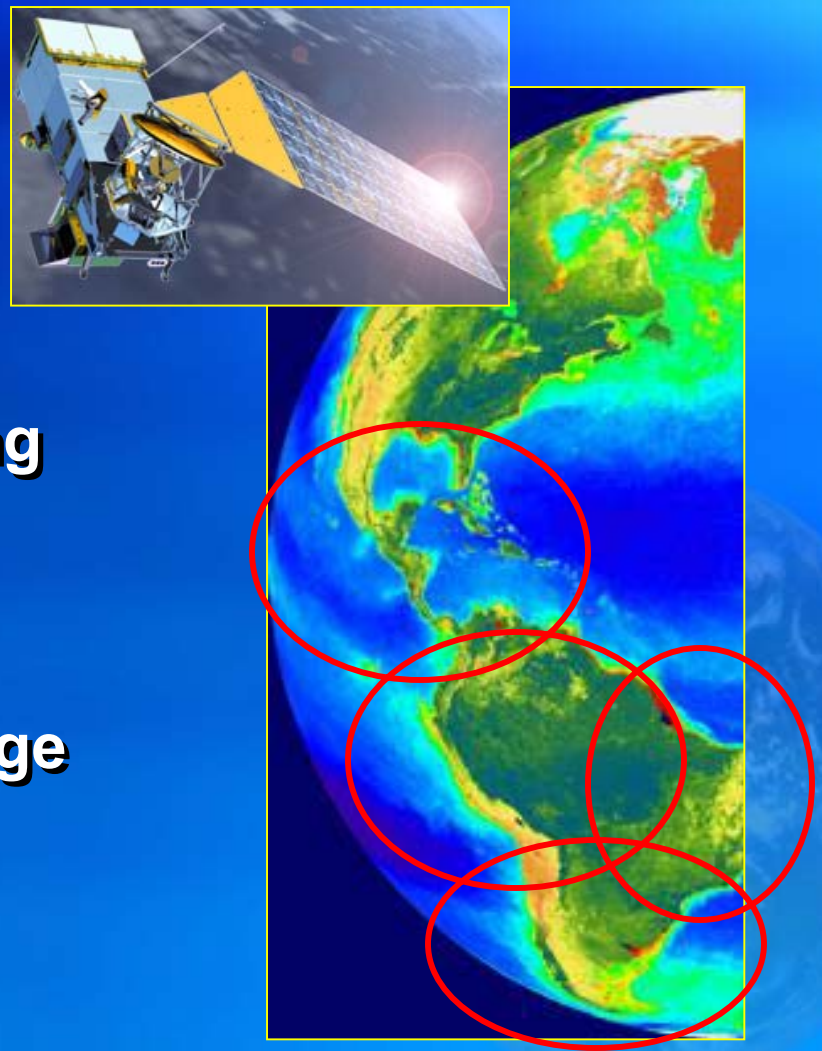
- 15 GOES GVAR Sites
- 2079 Data Collection Platforms

World Wide Estimates:

- APT = 5,000 – 10,000
- HRPT = 1,000 – 2,000
- HR / GVAR = 1,000 – 2,000
- POES Data Collection Platforms – 12,000

On-going Dialogue with Western Hemisphere Users to Increase Access to NOAA Satellites

- Facilitate upgrades
- Technical assistance
- Conduct necessary training
- Develop and exchange algorithms
- Promote scientific exchange and cooperation



Opportunities Through Partnerships